



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

RBE350A93-3317-20
Job Sheet 188642

Tel (613) 632-5200
Fax 613 632-5246



Part No: RBE350A93-3317-20

Job Qty: 6 ea

Part Name: Tail Rotor Hub Insert Tool



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 1/14/19

Job Tracking No:

Due Date: 1/18/19

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG RBE350A93-3317-20 REV: 1B IPP REV: A 18.01.15 NEW ISSUE RQ VERIFIED BY: DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	6 Ea		1/18/19	0.00	0.00	Start Up Machining-4		SL
120	CNC Lathe	6 pcs		1/18/19	0.00	0.50	SL2500Y		SL
130	QC	6 pcs		1/18/19	0.00	0.00	QC2		SL
140	QC	6 pcs		1/18/19	0.00	0.00	QC8 Machining-2		SL
170	Outsource	6 pcs		1/18/19			MEMOD LVC GROUPE ALTECH 15		SL
180	Packaging	6 pcs		1/18/19	0.00	0.00	Packaging2		SL
185	QC	6 pcs		1/18/19	0.00	0.00	QC6		SL
190	Packaging	6 pcs		1/18/19	0.00	0.00	Packaging3		SL
210	QC21-FG	6 Ea		1/18/19	0.00	0.00	QC21		SL

Part Op 120 - 1-Machine as per folio FB742 FOLIO REV: _____ DWG REV: _____ 2-Deburr Engrave T/N And /
Descriptions: or S/N number as required Using Marktronic engraver as per DWG.

170 - Issue P/O to Groupe Altech; PO 042317 -Black oxide finish, MIL-C-13924C Class 1 -Certificate of

Conformity is required

180 - Receive

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
MT-4140QT-R2.250	AISI 4140 Quenched & Tempered Steel Round Bar 2.250" Dia.	2.3250 ft (.3875 ea)	90-Start up Operation	5122005 3.0 36"

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	MT-4140QT-R2.250	2	9	0



Container No: S145755



Part: RBE350A93-3317-20

Job No: 188642

Serial No/Batch: S145755

Revision: 1B

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Specifications

Specifications could not be found.

Plex 1/14/19 7:52 AM Dart.lajeunesse.marie

919 18/07/17 MATOUI-W
905 18/10/26 MAT-LEU

Date: 01/17/19

Entered: _____ Date: _____



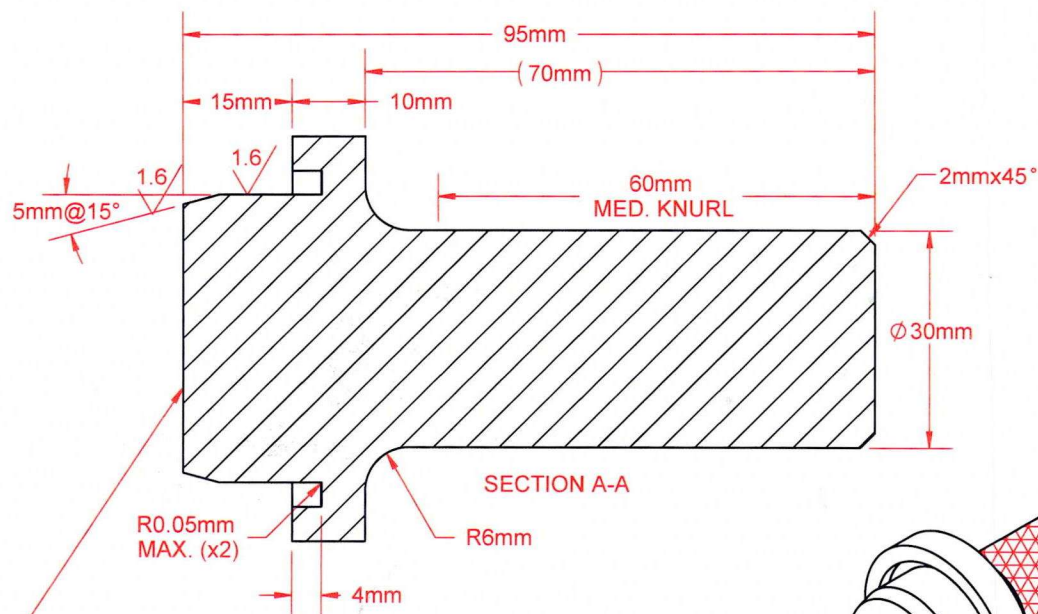
WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Presservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					

REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
1	DESIGNED PER HELI PRODUCTS TOOLS	9/28/09	WP	DW
1A	ADDED ENGRAVE NOTE & 70mm REF. DIMENSION.	10/4/11	RJC	DW
1B	CH'D T/N WAS RBEA93-3317-20 IS RBE350A93-3317-20.	11/6/13	RJC	RW



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT

188642 MLS
1901-14

ASSY QTY	ASSY QTY	B/O	PART #	UNIT QTY	DESCRIPTION	MATERIAL	B/O INFORMATION OR SPECIFICATIONS	Pg
				1	INSERT TOOL	4140 Q&T	Ø2-1/4 in. x4 in.	-
	ASSY #							

 RED BARN MACHINE	
TITLE TAIL ROTOR HUB INSERT TOOL	
DWG NO RBE350A93-3317-20	REV 1B
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS METRIC ±0.1 .XXX ±.005 FRACTIONS ± 1/32 .XX ±.01 ANGLES ± 5° X ±.1	DRAWN BY: PERRITT APPROVED HEAT TREAT FINISH SPEC BLACK OXIDE USED ON MODEL EUROCOPTER
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .2015 X 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	SCALE NTS DATE 9-28-09 SHEET 1 of 1



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO042317



Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

PO No: PO042317
PO Date: 1/18/19
Due Date: 1/24/19
**Purchase Order
Revision:**
Revision Date:
Ship-To Contact: Tsimiklis, ChrisoulaPhone:

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pymt Terms: Net 60
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1		RBE350A93- 3317-20	Tail Rotor Hub Insert Tool Issue P/O to Groupe Altech; PO _____ -Black oxide finish, MIL-C- 13924C Class 1 -Certificate of Conformity is required	Firmed	-	1/24/19	6 pcs	0 pcs	6 pcs	\$20.00/pcs	\$120.00
											Grand Total: \$120.00

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retension of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit
www.dartaerospace.com for further explanation.

Plex 1/18/19 11:00 AM dart.tsimiklis.chrisoula



Certificat de Conformité / Certificate of Compliance

(016128-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

016128- 1

Livré à / Ship to

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.	Bon de commande Client Customer Purchase Order No.				
24-Jan-2019		Jessie Boisvert		042317				
#Ligne Line#	No. de Série / # Pièce Part Number / Line Item Details	Description pièce(s)	CATG. U/M	Quantités / Quantities				
Job # / Ref #	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order			
1	RBE350A93-3317-20 ✓ Rev.	RBE350A93-3317-20 01 -BLACK OXIDE FINISH ON SST MIL-C-13924C, CLASS 1	BLACK-OXIDE CH	6	6	0	0	0

 DAS
 38
 9-88

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness
Inspecteur Qualité
Quality Inspector
Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.